

CURRICULUM VITAE

Name: Gregory A. Prince, D.D.S., Ph.D.

Birth: May 1, 1948, Santa Monica, California.

Citizenship: United States.

Marital Status: Married, three children.

Education:

A.S.: Dixie College (St. George, Utah) - 1965-1967.

D.D.S.: University of California, Los Angeles, School of Dentistry - 1969-1973.

Ph.D.: University of California, Los Angeles, Graduate Division, Department of Pathology, School of Medicine - 1973-1975.

Social Service: Missionary, Brazilian South Mission (Porto Alegre, Brazil) - The Church of Jesus Christ of Latter-day Saints - 1967-1969.

Member, Board of Trustees, Dialogue Foundation - 1999-present.

Member, National Advisory Board, Dixie State College of Utah - 2000 - present.

Employment:

1975-1977: Staff Fellow/Senior Staff Fellow, Laboratory of Oral Medicine, National Institute of Dental Research, National Institutes of Health, Bethesda, Maryland.

1977-1986: Senior Staff Fellow/Biologist/Expert, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland.

1979-1994: Dentist, self-employed in private general practice, Gaithersburg, Maryland.

1983-1990: Clinical Assistant Professor, Department of Pathology, School of Medicine, Georgetown University, Washington, D.C.

1985-present: Clinical Assistant Professor, Department of Pathology, School of Medicine, University of California, Los Angeles.

1986-present: Research Associate Professor (1986-1991) and Research Professor (1991-present), Department of Pediatrics, F. Edward Hebert School of Medicine, Uniformed Services University of the Health Sciences, Bethesda, Maryland.

1987-1990: Adjunct Associate Professor, Department of International Health, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Maryland.

1990-1999: Vice President, Virion Systems, Inc., Rockville, Maryland.

1999-present: President and CEO, Virion Systems, Inc., Rockville, Maryland

Societies: Diplomate, National Board of Dental Examiners - 1973.
California Dental License #23367 - 1973.
Maryland Dental License #6209 - 1976.
American Association of Immunologists - 1981.

Honors and Other Special Scientific Recognition:

Phi Theta Kappa (National Junior College Scholastic Honorary) - 1967.
Valedictorian, Dixie College - 1967.
Regents' Scholar, University of California - 1970-1973.
Omicron Kappa Upsilon (National Dental Scholastic Honorary) - 1973.
Alpha Omega Award (Dental Valedictorian) - 1973.
Doctor of Dental Surgery, Summa Cum Laude - 1973.
Dixie College Distinguished Citizen Award - 1995.
Dixie College Hall of Fame - 1999.

SCIENTIFIC PUBLICATIONS:

1. Prince, G. A. and Porter, D. D.: Cryostat microtomy of lung tissue in an expanded state. *Stain Technol.* 50:43-45, 1975.
2. Prince, G. A. and Porter, D. D.: The pathogenesis of respiratory syncytial virus infection in infant ferrets. *Am. J. Pathol.* 82:339-352, 1976.
3. Prince, G. A., Jenson, A. B., Billups, L. C. and Notkins, A. L.: Infection of human pancreatic beta cell cultures with mumps virus. *Nature* 271:158-161, 1978.
4. Prince, G. A., Jenson, A. B., Horswood, R. L., Camargo, E. and Chanock, R. M.: The pathogenesis of respiratory syncytial virus infection in cotton rats. *Am. J. Pathol.* 93:771-791, 1978.
5. Prince, G. A., Horswood, R. L., Berndt, J. A., Suffin, S. C. and Chanock, R. M.: Respiratory syncytial virus infection in inbred mice. *Infect. Immun.* 26:764-766, 1979.
6. Prince, G. A., Potash, L., Horswood, R. L., Camargo, E., Suffin, S. C., Johnson, R. A. and Chanock, R. M.: Intramuscular inoculation of live respiratory syncytial virus induces immunity in cotton rats. *Infect. Immun.* 23:723-728, 1979.
7. Prince, G. A., Suffin, S. C., Prevar, D. A., Camargo, E., Sly, D. L., London, W. T. and Chanock, R. M.: Respiratory syncytial virus infection in owl monkeys: Viral shedding, immunological response, and associated illness caused by wild-type virus and two temperature-sensitive mutants. *Infect. Immun.* 26:1009-1013, 1979.
8. Suffin, S. C., Prince, G. A., Muck, K. B. and Porter, D. D.: Ontogeny of the humoral immune response in the ferret. *J. Immunol.* 123:6-9, 1979.
9. Suffin, S. C., Prince, G. A., Muck, K. B. and Porter, D. D.: Immunoprophylaxis of respiratory syncytial virus infection in the infant ferret. *J. Immunol.* 123:10-14, 1979.
10. Porter, D. D., Muck, K. B. and Prince, G. A.: The age dependence of respiratory syncytial virus growth in ferret lung can be shown in organ and monolayer cultures. *Clin. Immunol. Immunopathol.* 15:415-423, 1980.
11. Suffin, S. C., Kaufman, A. F., Whitaker, B., Muck, K. B., Prince, G. A. and Porter, D. D.: *Legionella pneumophila*: Identification in tissue sections by a new immunoenzymatic procedure. *Arch. Pathol. Lab. Med.* 104:283-286, 1980.
12. Suffin, S. C., Prince, G. A., Hocko, J. and Chanock, R. M.: Immunoenzymatic examination of autoptic tissues from the outbreak of fatal infantile disease in Naples, in 1978-1979. *Annali dell Instituto Superiore di Sanita (Rome)* 17:777-782, 1981.

13. Johnson, R. A., Prince, G. A., Suffin, S. C., Horswood, R. L. and Chanock, R. M.: Respiratory syncytial virus infection in cyclophosphamide-treated cotton rats. *Infect. Immun.* 37:369-373, 1982.
14. Prince, G. A., Horswood, R. L., Camargo, E., Suffin, S. C. and Chanock, R. M.: Parenteral immunization with live respiratory syncytial virus is blocked in seropositive cotton rats. *Infect. Immun.* 37:1074-1078, 1982.
15. Prince, G. A., Horswood, R. L., Camargo, E., Koenig, D. and Chanock, R. M.: Mechanisms of immunity to respiratory syncytial virus in cotton rats. *Infect. Immun.* 42:81-87, 1983.
16. Prince, G. A., Hemming, V. G., Horswood, R. L. and Chanock, R. M.: Immunoprophylaxis and immunotherapy of respiratory syncytial virus infection in the cotton rat. *Virus Res.* 3:193-206, 1985.
17. Hemming, V. G., Prince, G. A., Horswood, R. L., London, W. T., Murphy, B. R., Walsh, E. E., Fischer, G. W., Weisman, L. E., Baron, P. A. and Chanock, R. M.: Studies of passive immunity for infections of respiratory syncytial virus in the respiratory tract of a primate model. *J. Infect. Dis.* 152:1083-1086, 1985.
18. Prince, G. A., Horswood, R. L. and Chanock, R. M.: Quantitative aspects of passive immunity to respiratory syncytial virus infection in infant cotton rats. *J. Virol.* 55:517-520, 1985.
19. Prince, G. A., Horswood, R. L., Koenig, D. W. and Chanock, R. M.: Antigenic analysis of a putative new strain of respiratory syncytial virus. *J. Infect. Dis.* 151:634-637, 1985.
20. Elango, N., Prince, G. A., Murphy, B. R., Venkatensan, S., Chanock, R. M. and Moss, B.: Resistance to human respiratory syncytial virus (RSV) infection induced by immunization of cotton rats with recombinant vaccinia virus expressing the RSV G glycoprotein. *Proc. Nat. Acad. Sci. USA* 83:1906-1910, 1986.
21. Hemming, V. G. and Prince, G. A.: Intravenous immunoglobulin G in viral respiratory infections for newborns and infants. *Pediatr. Infect. Dis.* 5:S204-S206, 1986.
22. Hemming, V. G., Prince, G. A., London, W. T., Murphy, B. R., Baron, P. A., Horswood, R. L., Fischer, G. W. and Chanock, R. M.: Immunoglobulins in respiratory syncytial virus infections. In: *Clinical Use of Intravenous Immunoglobulins*. London, Academic Press Inc., 1986, pp. 285-294.
23. Murphy, B. R., Graham, B. S., Prince, G. A., Walsh, E. E., Chanock, R. M., Karzon, D. T. and Wright, P. F.: Serum and nasal-wash immunoglobulin G and A antibody responses of infants and children to respiratory syncytial virus F and G glycoproteins following primary infection. *J. Clin. Microbiol.* 23:1009-1014, 1986.

24. Murphy, B. R., Prince, G. A., Walsh, E. E., Kim, H. W., Hemming, V. G., Rodriguez, W. and Chanock, R. M.: Dissociation between serum neutralizing and glycoprotein antibody responses of infants and children who received inactivated respiratory syncytial virus vaccine. *J. Clin. Microbiol.*, 24:197-202, 1986.
25. Olmsted, R. A., Elango, N., Prince, G. A., Murphy, B. R., Johnson, P. R., Moss, B., Chanock, R. M. and Collins, P. L.: Expression of the F glycoprotein of respiratory syncytial virus by a recombinant vaccinia virus: Comparison of the individual contributions of the F and G glycoproteins to host immunity. *Proc. Nat. Acad. Sci. USA* 83:7462-7466, 1986.
26. Prince, G. A., Hemming, V. G. and Chanock, R. M.: The use of purified immunoglobulin in the therapy of respiratory syncytial virus infection. *Pediatr. Infect. Dis.* 5:S201-S203, 1986.
27. Prince, G. A., Jenson, A. B., Hemming, V. G., Murphy, B. R., Walsh, E. E., Horswood, R. L. and Chanock, R. M.: Enhancement of respiratory syncytial virus pulmonary pathology in cotton rats by intramuscular inoculation of formalin inactivated virus. *J. Virol.* 57:721-728, 1986.
28. Prince, G. A., Murphy, B. R., Chanock, R. M., Hemming, V. G. and Walsh, E. E.: Mechanism by which intramuscular inoculation of formalin-inactivated respiratory syncytial virus (RSV) enhances pulmonary pathology in cotton rats subsequently infected with RS virus. In: Brown, F., Chanock, R. M. and Lerner, R. A. (eds.): *Vaccines 86: New Approaches to Immunization*. New York, Cold Spring Harbor, 1986, pp. 261-266.
29. Murphy, B. R., Alling, D. W., Snyder, M. H., Walsh, E. E., Prince, G. A., Chanock, R. M., Hemming, V. G., Rodriguez, W., Kim, H. W., Graham, B. S. and Wright, P. F.: The effect of age and preexisting antibody on serum antibody response of infants and children to the F and G glycoprotein during respiratory syncytial virus infection. *J. Clin. Microbiol.* 24:894-898, 1986.
30. Prince, G. A., Hemming, V. G., Horswood, R. L., Baron, P. A. and Chanock, R. M.: Effectiveness of topically administered neutralizing antibodies in experimental immunotherapy of respiratory syncytial virus infection in cotton rats. *J. Virol.* 61:1851-1854, 1987.
31. Ginsberg, H. S., Lundholm-Beauchamp, U. and Prince, G. A.: Adenovirus as a model of disease. *Symposia of the Society for General Microbiology* 40, *Molecular Basis of Virus Disease*, Cambridge University Press, 1987, pp. 245-258.
32. Murphy, B. R., Prince, G. A., Wagner, D. K., Walsh, E. E. and Chanock, R. M.: The immune response of humans and cotton rats to respiratory syncytial virus (RSV) infection or formalin-inactivated vaccine. In: Brown, F., et al. (eds.): *Vaccines 87: Modern Approaches to New Vaccines Including Prevention of AIDS*. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, 1987, pp. 290-295.

33. Ginsberg, H. S., Valdesuso, J., Horswood, R. L., Chanock, R. M. and Prince, G. A.: Adenovirus gene products affecting pathogenesis. In: Brown, F., et al. (eds.): *Vaccines 87: Modern Approaches to New Vaccines Including Prevention of AIDS*. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, 1987, pp. 322-326.
34. Olmsted, R. A., Johnson, P. R., Prince, G. A., Murphy, B. R., Elango, N., Moss, B., Chanock, R. M. and Collins, P. L.: Immunogenicity and protective efficacy of a recombinant vaccinia virus expressing the F glycoprotein of respiratory syncytial virus. In: Brown, F., et al. (eds.): *Vaccines 87: Modern Approaches to New Vaccines Including Prevention of AIDS*. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, 1987, pp. 350-355.
35. Johnson, P. R., Olmsted, R. A., Prince, G. A., Murphy, B. R., Alling, D. W., Walsh, E. E. and Collins, P. L.: Antigenic relatedness between the glycoproteins of human respiratory syncytial virus subgroups A and B: Evaluation of the contributions of the F and G glycoproteins to immunity. *J. Virol.* 61:3163-3166, 1987.
36. Spriggs, M., Murphy, B. R., Prince, G. A., Olmsted, R. A. and Collins, P. L.: Expression of the F and HN glycoproteins of human parainfluenza virus type 3 by recombinant vaccinia viruses: Contributions of the individual proteins to host immunity. *J. Virol.* 61:3416-3423, 1987.
37. Zhao, B., Prince, G. A., Horswood, R. L., Eckels, K., Summers, P., Chanock, R. M. and Lai, C.-J.: Expression of dengue structural proteins and nonstructural protein NS-1 by a recombinant vaccinia virus. *J. Virol.* 61:4019-4022, 1987.
38. Hemming, V. G., Rodriguez, W., Kim, H. W., Brandt, C. D., Parrott, R. H., Burch, B., Prince, G. A., Baron, P. A., Fink, R. J. and Reaman, G.: Intravenous immunoglobulin treatment of respiratory syncytial virus infections in infants and young children. *Antimicrob. Agents Chemother.* 31:1882-1886, 1987.
39. Hemming, V. G., Prince, G. A., Rodriguez, W., Kim, H. W., Brandt, C. D., Parrott, R. H., London, W. T., Fischer, G. W., Baron, P. A. and Henson, S. A.: Respiratory syncytial virus infections and intravenous gammaglobulins. *Pediat. Infect. Dis.* 7:S103-S106, 1988.
40. Chanock, R. M., Murphy, B. R., Collins, P. L., Coelingh, K. V. W., Olmsted, R. A., Snyder, M. H., Spriggs, M. K., Prince, G. A., Moss, B., Flores, J., Gorziglia, M. and Kapikian, A. Z.: Live viral vaccines for respiratory and enteric tract diseases. *Vaccines* 6:129-133, 1988.
41. Prince, G. A., Hemming, V. G., Murphy, B. R. and Chanock, R. M.: The prophylactic and therapeutic effects of serum antibody on respiratory syncytial virus infection of laboratory animals. In: Strober, W. et al. (eds): *Mucosal Immunity and Infections at Mucosal Surfaces*. New York, Oxford University Press, 1988, pp. 279-283.

42. Murphy, B. R., Olmsted, R. A., Collins, P. L., Chanock, R. M. and Prince, G. A.: Passive transfer of respiratory syncytial virus (RSV) antiserum suppresses the immune response to the RSV fusion (F) and large (G) glycoproteins expressed by recombinant vaccinia viruses. *J. Virol.* 62:3907-3910, 1988.

43. Hemming, V. G., Prince, G. A., London, W. T., Baron, P. A., Brown, R. and Chanock, R. M.: Topically administered immunoglobulin reduces respiratory syncytial virus shedding in owl monkeys. *Antimicrob. Agents Chemother.* 32:1269-1270, 1988.

44. Hendry, R. M., Burns, J. C., Walsh, E. E., Graham, B. S., Wright, P. F., Hemming, V. G., Rodriguez, W. J., Kim, H. W., Prince, G. A., McIntosh, K. and Murphy, B. R.: Strain-specific serum antibody responses in infants undergoing primary infection with respiratory syncytial virus. *J. Infect. Dis.* 157:640-647, 1988.

45. Olmsted, R. A., Buller, R. M. L., Collins, P. L., London, W. T., Beeler, J. A., Prince, G. A., Chanock, R. M. and Murphy, B. R.: Evaluation in non-human primates of the safety, immunogenicity and efficacy of recombinant vaccinia viruses expressing the F and G glycoproteins of respiratory syncytial virus. *Vaccine* 6:519-524, 1988.

46. Murphy, B. R., Prince, G. A., Collins, P. L., Van Wyke Coelingh, K., Olmsted, R. A., Spriggs, M. K., Parrott, R. H., Kim, H. W., Brandt, C. D. and Chanock, R. M.: Current approaches to the development of vaccines effective against parainfluenza and respiratory syncytial viruses. *Virus Res.* 11:1-15, 1988.

47. Prince, G. A., Chanock, R. M. and Hemming, V. G.: Immunotherapeutic method of treating respiratory disease by intranasal administration of IGB. United States Patent #4,800,078, 1989.

48. Murphy, B. R., Collins, P. L., Chanock, R. M. and Prince, G. A.: Intranasal immunization with Vaccinia-RS virus recombinant viruses is superior to intradermal immunization in animals with passively acquired RS virus antibodies. In: Lerner, R. A., Ginsberg, H., Chanock, R. M. and Brown, F. (eds.): *Vaccines 89: Modern Approaches to New Vaccines Including Prevention of AIDS*. New York, Cold Spring Harbor Laboratory, 1989, pp. 501-505.

49. Ginsberg, H. S. and Prince, G. A.: Gene functions directing adenovirus pathogenesis. In: Notkins, A. L. et al. (eds.): *Concepts in Viral Pathogenesis III*. Springer-Verlag New York Incorporated, New York, NY, 1989, pp. 275-281.

50. Murphy, B. R., Collins, P. L., Lawrence, L., Zubak, J., Chanock, R. M. and Prince, G. A.: Immunosuppression of the antibody response to respiratory syncytial virus (RSV) by pre-existing serum antibodies: Partial prevention by topical infection of the respiratory tract with vaccinia virus-RSV recombinants. *J. Gen. Virol.* 70:2185-2190, 1989.

51. Ginsberg, H. S., Lundholm-Beauchamp, U., Horswood, R. L., Pernis, B., Wold, W. S. M., Chanock, R. M. and Prince, G. A.: Role of early region 3 (E3) in pathogenesis of adenovirus disease. *Proc. Nat. Acad. Sci. USA* 86:3823-3827, 1989.
52. Murphy, B. R., Sotnikov, A., Paradiso, P. R., Hildreth, S. W., Jenson, A. B., Baggs, R. B., Lawrence, L., Zubak, J. J., Chanock, R. M., Beeler, J. A. and Prince, G. A.: Immunization of cotton rats with the fusion (F) and large (G) glycoproteins of respiratory syncytial virus (RSV) protects against RSV challenge without potentiating RSV disease. *Vaccine* 7:533-540, 1989.
53. Collins, P. L., Prince, G. A., Camargo, E., Purcell, R. H., Chanock, R. M., Murphy, B. R., Davis, A. R., Lubeck, M. D., Mizutani, S. and Hung, P. P.: Evaluation of the protective efficacy of recombinant vaccinia viruses and adenoviruses that express respiratory syncytial virus glycoproteins. In: Brown, F., Chanock, R. M., Ginsberg, H. S. and Lerner, R. A. (eds.): *Vaccines 90: Modern Approaches to New Vaccines Including Prevention of AIDS*. New York, Cold Spring Harbor Laboratory Press, 1990, pp. 79-84.
54. Ginsberg, H. S., Horswood, R. L., Chanock, R. M. and Prince, G. A.: Role of early genes in pathogenesis of adenovirus pneumonia. *Proc. Nat. Acad. Sci. USA* 87:6191-6195, 1990.
55. Prince, G. A., Hemming, V. G., Horswood, R. L., Baron, P. A., Murphy, B. R. and Chanock, R. M.: Mechanism of antibody-mediated viral clearance in immunotherapy of respiratory syncytial virus infection of cotton rats. *J. Virol.* 64:3091-3092, 1990.
56. Murphy, B. R., Prince, G. A., Lawrence, L. A., Croen, K. D. and Collins, P. L.: Detection of respiratory syncytial virus (RSV) infected cells by in situ hybridization in the lungs of cotton rats immunized with formalin-inactivated virus or purified RSV F and G glycoprotein subunit vaccine and challenged with RSV. *Virus Res.* 16:153-162, 1990.
57. Murphy, B. R., Sotnikov, A. V., Lawrence, L. A., Banks, S. M. and Prince, G. A.: Enhanced pulmonary histopathology is observed in cotton rats immunized with formalin-inactivated respiratory syncytial virus (RSV) or purified F glycoprotein and challenged with RSV 3-6 months after immunization. *Vaccine* 8:497-502, 1990.
58. Hemming, V. G. and Prince, G. A.: Immunoprophylaxis of infections with respiratory syncytial virus: Observations and hypothesis. *Rev. Infect. Dis.* 12(Supplement 4):S470-S475, 1990.
59. Ginsberg, H. S., Moldawer, L. L., Sehgal, P. B., Redington, M., Kilian, P. L., Chanock, R. M. and Prince, G. A.: A mouse model for investigating the molecular pathogenesis of adenovirus pneumonia. *Proc. Nat. Acad. Sci. USA* 88:1651-1655, 1991.

60. Hemming, V. G. and Prince, G. A.: Passive immunization for the protection of infants and young children from respiratory infection by respiratory syncytial virus. In: Imbach, P. (ed.): *Immunotherapy With Intravenous Immunoglobulins*. London, Academic Press, Ltd., 1991, pp. 103-112.
61. Porter, D. D., Prince, G. A., Hemming, V. G. and Porter, H. G.: Pathogenesis of human parainfluenza virus type 3 infection in two species of cotton rats: *Sigmodon hispidus* develops bronchiolitis while *Sigmodon fulviventer* develops interstitial pneumonia. *J. Virol.* 65:103-111, 1991.
62. Bansal, G. P., Hatfield, J., Young, J. F., Top, F. H., Prince, G. A., Horswood, R. L., Hemming, V. G. and Hensen, S.: Efficacy of passively administered monoclonal antibodies against respiratory syncytial virus infection in cotton rats. In: Chanock, R. M. et al. (eds.): *Vaccines 91: Modern Approaches to New Vaccines Including Prevention of AIDS*. New York, Cold Spring Harbor Laboratory Press, 1991, pp. 283-288.
63. Muelenaer, P. M., Henderson, F. W., Hemming, V. G., Walsh, E. E., Anderson, L. J., Prince, G. A. and Murphy, B. R.: Group-specific serum antibody responses in children with primary and recurrent respiratory syncytial virus infections. *J. Infect. Dis.* 164:15-21, 1991.
64. Murphy, B. R., Prince, G. A., Collins, P. L., Hildreth, S. W. and Paradiso, P. R.: Effect of passive antibody on the immune response of cotton rats to purified F and G glycoproteins of respiratory syncytial virus (RSV). *Vaccine* 9:185-189, 1991.
65. Prince, G. A., Redington, M., Piazza, F. M., Hemming, V. G.: Bovine respiratory syncytial virus provides protection against human respiratory syncytial virus infection in cotton rats and primates. In: *Animal Models of Respiratory Syncytial Virus Infections*. Lyon, France, Edition Fondation Marcel Merieux, 1991, pp. 133-135.
66. Hemming, V. G., Prince, G. A.: Respiratory syncytial virus: Babies and antibodies. *Infect. Agents Dis.* 1:24-32, 1992.
67. Piazza, F. M., Johnson, S. A., Ottolini, M. G., Schmidt, H. J., Darnell, M. E. R., Hemming, V. G., Prince, G. A.: Immunotherapy of respiratory syncytial virus infection in cotton rats (*Sigmodon fulviventer*) using IgG in a small-particle aerosol. *J. Infect. Dis.* 166:1422-1424, 1992.
68. Prince, G. A., Porter, D. D., Jenson, A. B., Horswood, R. L., Chanock, R. M., Ginsberg, H. S.: The pathogenesis of type 5 adenovirus pneumonia in the cotton rat (*Sigmodon hispidus*). *J. Virol.* 67:101-111, 1993.
69. Piazza, F. M., Johnson, S. A., Darnell, M. E. R., Porter, D. D., Hemming, V. G., Prince, G. A.: Bovine respiratory syncytial virus protects cotton rats against human respiratory syncytial virus infection. *J. Virol.* 67:1503-1510, 1993.

70. Groothuis, J. R., Simoes, E. A. F., Levin, M. J., Hall, C. B., Long, C. E., Rodriguez, W. J., Arrobia, J., Meissner, H. C., Fulton, D. R., Welliver, R. C., Tristram, D. A., Siber, G. R., Prince, G. A., Van Raden, M., Hemming, V. G.: Prophylactic administration of respiratory syncytial virus immune globulin in high-risk infants and young children. *New England J. Med.* 329:1524-1530, 1993.

71. Siber, G. R., Leombruno, D., Leszczynski, J., McIver, M., Bodkin, D., Gonin, R., Thompson, C. M., Walsh, E. E., Piedra, P. A., Hemming, V. G., Prince, G. A.: Comparison of antibody concentrations and protective activity of respiratory syncytial virus immune globulin and conventional immune globulin. *J. Infect. Dis.* 169:1368-1373, 1994.

72. Ginsberg, H. S. and Prince, G. A.: The molecular basis of adenovirus pathogenesis. *Infect. Agents Dis.* 3:1-8, 1994.

73. Prince, G. A. and Hemming, V. G.: Method for treating infectious respiratory diseases. United States Patent #5,290,540, 1994.

74. Prince, G. A.: The cotton rat in biomedical research. *Animal Welfare Information Center Newsletter* 5:3-5, 1994.

75. Hemming, V. G., Prince, G. A., Groothuis, J. R., Siber, G. R.: Hyperimmune globulins in the prevention and treatment of respiratory syncytial virus infections: A review. *Clin. Microbiol. Rev.* 8:22-33, 1995.

76. Sami, I. R., Piazza, F. M., Johnson, S. A., Darnell, M. E. R., Ottolini, M. G., Hemming, V. G., Prince, G. A.: Systemic immunoprophylaxis of nasal respiratory syncytial virus infection in cotton rats. *J. Infect. Dis.* 171:440-443, 1995.

77. Piazza, F. M., Schmidt, H. J., Johnson, S. A., Dotson, D. L., Darnell, M. E. R., Ottolini, M. G., Porter, D. D., Prince, G. A.: A cotton rat model of effectors of immunity to respiratory syncytial virus other than serum antibody. *Pediat. Pulmonol.* 19:355-359, 1995.

78. Ottolini, M. G., Hemming, V. G., Piazza, F. M., Johnson, S. A., Darnell, M. E. R., Prince, G. A.: Topical immunoglobulin is an effective therapy for parainfluenza type 3 in a cotton rat model. *J. Infect. Dis.* 172:243-245, 1995.

79. Colasurdo, G. N., Hemming, V. G., Prince, G. A., Loader, J. E., Graves, J. P., Larsen, G. L.: Effect of human respiratory syncytial virus on the nonadrenergic noncholinergic inhibitory system in cotton rat airways *in vitro*. *Am. J. Physiol. - Lung* 12:1006-1011, 1995.

80. Armentano, D., Sookdeo, C. C., Hehir, K. M., Gregory R. J., St. George, J. A., Prince, G. A., Wadsworth, S. C., Smith, A. E.: Characterization of an adenovirus gene transfer vector containing an E4 deletion. *Human Gene Therapy* 6:1343-1353, 1995.

81. Johnson, S. A., Ottolini, M. G., Darnell, M. E. R., Porter, D. D., Prince, G. A.: Unilateral nasal infection of cotton rats with respiratory syncytial virus allows assessment of local and systemic immunity. *J. Gen. Virol.* 77:101-108, 1996.
82. Prince, G. A., Porter, D. D.: Treatment of parainfluenza virus type 3 bronchiolitis and pneumonia in a cotton rat model using topical antibody and glucocorticosteroid. *J. Infect. Dis.* 173:598-608, 1996.
83. Ottolini, M. G., Porter, D.D., Hemming, V. G., Hensen, S. A., Sami, I. R., Prince, G. A.: Semi-permissive replication and functional aspects of the immune response in a cotton rat model of human parainfluenza type 3 infection. *J. Gen. Virol.* 77:1739-1743, 1996.
84. Coe, J. E., Prince, G.A.: Definition of cotton rat immunoglobulins: sigmodon species differ in expression of IgG isotypes and production of respiratory syncytial virus antibody. *Immunology* 88:323-330, 1996.
85. Faverio, L. A., Piazza, F. M., Johnson, S. A., Darnell, M. E. R., Ottolini, M. G., Hemming, V. G., Prince, G. A.: Immunoprophylaxis of Group B respiratory syncytial virus infection in cotton rats. *J. Infect. Dis.* 175:932-934, 1997.
86. Johnson, S., Oliver, C., Prince, G. A., Hemming, V. G., Pfarr, D. S., Wang, S.-C., Dormitzer, M., O'Grady, J., Koenig, S., Tamura, J. K., Woods, R., Bansal, G., Couchenour, D., Tsao, E. Hall, W. C., Young, J.F.: Development of a humanized monoclonal antibody (MEDI-493) with potent in vitro and in vivo activity against respiratory syncytial virus. *J. Infect. Dis.* 176:1215-1224, 1997.
87. Byrd, L. G., Prince, G. A.: The role of animal models in the development of RespiGam™ as a preventive for respiratory syncytial virus disease in infants. In: Bellanti, J. A., Bracci, R., Prindull, G., Xanthou, M. (eds.): *Neonatal Hematology and Immunology III*. Amsterdam: Elsevier Science, 1997, pp. 85-90.
88. Byrd, L. G., Prince, G. A.: Respiratory syncytial virus and animal modeling. *Clin. Infect. Dis.* 25:1363-1368, 1997.
89. Colasurdo, G. N., Hemming, V. G., Prince, G. A., Gelfand, A. S., Loader, J. E., Larsen, G. L.: Human respiratory syncytial virus produces prolonged alterations of neural control in airways of developing ferrets. *Am. J. Respir. Crit. Care Med.* 157:1506-1511, 1998.
90. Sullender, W. M., Mufson, M. A., Prince, G. A., Anderson, L. J., Wertz, G. W.: Antigenic and genetic diversity among the attachment proteins of Group A respiratory syncytial viruses which have caused repeat infections in children. *J. Infect. Dis.* 178:925-932, 1998.
91. Langley, R. J., Prince, G. A., Ginsberg, H. S.: Human immunodeficiency virus type-1 (HIV-1) infection of the cotton rat (*Sigmodon fulviventer* and *S. hispidus*). *Proc. Nat. Acad. Sci. USA* 95:14355-14360, 1998.

92. Contreras, P. A., Sami, I. R., Darnell, M. E. R., Ottolini, M. G., Prince, G. A.: Inactivation of respiratory syncytial virus by generic hand dishwashing detergents and antibacterial hand soap. *Infect. Control Hosp. Epidemiol.* 20:57-58, 1999.

93. Prince, G. A.: The cotton rat as a model of respiratory syncytial virus pathogenesis, prophylaxis and therapy. In: Zak, O. and Sande, M. (eds.): *Handbook of Animal Models of Infection*. London: Academic Press Ltd., pp. 997-1002, 1999.

94. Ottolini, M. G., Porter, D. D., Hemming, V. G., Zimmerman, N., Schwab, N. M., Prince, G. A.: Effectiveness of RSVIG prophylaxis and therapy of respiratory syncytial virus in an immunosuppressed animal model. *Bone Marrow Transplant.* 24:41-45, 1999.

95. Johnson, S., Pfarr, D. S., Koenig, S., Woods, R., Carlin, D., Young, J. F., Prince, G. A., Griego, S. D., Doyle, M. L., Dillon, S. B.: A direct comparison of the activities of two humanized RSV MAbs: MEDI-493 and RSHZ19. *J. Infect. Dis.* 180:35-40, 1999.

96. Prince, G. A.: Respiratory syncytial virus antiviral agents. *Exp. Opin. Ther. Patents* 9:753-762, 1999.

97. Prince, G. A., Prieels, J.-P., Slaoui, M., Porter, D. D.: Histologic profiles of primary respiratory syncytial virus (RSV) infection, reinfection, and vaccine-enhanced RSV disease in the cotton rat (*Sigmodon hispidus*). *Lab. Invest.* 79:1385-1392, 1999.

98. Ginsberg, H. S., Moldawer, L. L., Prince, G. A.: Role of the type 5 adenovirus gene encoding the early regional E1B 55 kD protein in pulmonary pathogenesis. *Proc. Nat. Acad. Sci. USA* 96:10409-10411, 1999.

99. Ottolini, M. G., Porter, D. D., Hemming, V. G., Prince, G. A.: Enhanced pulmonary pathology in cotton rats upon challenge after immunization with inactivated parainfluenza virus 3 vaccine. *Viral Immunology* 13:231-236, 2000.

100. Prince, G. A.: Animal models of RSV infection. In: Weisman, L. E. and Groothuis, J. R. (eds.): *Contemporary Diagnosis and Management of Respiratory Syncytial Virus Infection*. Newtown, Pennsylvania: Handbooks in Health Care Co., pp. 24-36, 2000.

101. Prince, G. A.: Treatment of viral pneumonia using a combination of antiviral and anti-inflammatory mediators. In: Gupta, S. K. (ed.): *Pharmacology and Therapeutics in the New Millennium*. New Delhi: Narosa Publishing House, [in press], 2000.

102. Prince, G. A., Capiau, C., Deschamps, M., Fabry, L., Garçon, N., Gheysen, D., Prieels, J.-P., Thiry, G., Van Opstal, O., Porter, D. D.: Efficacy and safety studies of a recombinant chimeric respiratory syncytial virus FG glycoprotein vaccine in cotton rats. *J. Virol.* 74:10287-10292, 2000.

103. Prince, G. A., Mathews, A., Curtis, S., Porter, D. D.: Treatment of respiratory syncytial virus bronchiolitis and pneumonia in a cotton rat model using systemically administered monoclonal antibody (palivizumab) and glucocorticosteroid. *J. Infect. Dis.* 182:1326-1330, 2000.
104. Prince, G. A., Denamur, F., Deschamps, M., Garçon, N., Prieels, J.-P., Slaoui, M., Thiriart, C., Porter, D. D.: Monophosphoryl lipid A adjuvant reverses a principal histologic parameter of formalin-inactivated respiratory syncytial virus vaccine-induced disease. *Vaccine* 19:2048-2054, 2001.
105. Prince, G. A.: An update on respiratory syncytial virus antiviral agents. *Exp. Opin. Invest. Drugs* 10:297-308, 2001.
106. Patterson, L. J., Prince, G. A., Richardson, E., Alvord, W. G., Kalyan, N., Robert-Guroff, M.: Insertion of HIV-1 genes into Ad4ΔE3 vector abrogates increased pathogenesis in cotton rats due to E3 deletion. *J. Infect. Dis.* [submitted].